



United States Department of State

Washington, D.C. 20520

June 4, 1984

MEMORANDUM

TO:

Mr. Harold Ford - National Intelligence Council V
- Defense Intelligence Agency
- Central Intelligence Agency
- Intelligence Community Staff

- Intelligence Community Staff

Mr. C. Thomas Thorne - INR/AR
Mr. William Miller - INR/EC
Mr. Dean Howells - INR/PMA
Mr. John Dardis - INR/PMA
Mr. Robert Strand - INR/PMA
Mr. Robert DuBose - INR/GI
Mr. Kenneth Roberts - INR/LAR

FROM:

State/INR/LAR - E. Raymond Platig

SUBJECT:

Battelle Prospectus for Global and Latin American

Forecasts to 1995

Those of you who attended the May 8 meeting with Steve Millett and Gary Stacey of Battelle will recall that they suggested a prospectus (rather than a formal proposal) as the next step. A prospectus dated May 25, 1984, is attached. The two asteriks on p.4 indicate other Battelle papers that I disseminated following the May 8 meeting. If you did not receive them and think it important to, please give me a call.

Would you be good enough to review the prosepctus and, by Tuesday, June 26, let me have your judgment on the following points:

- 1. Are the materials from Battelle sufficient for us to suggest that they submit a formal proposal? If not, what else is needed—a meeting of USG agency representatives to discuss the prospectus and possible modifications (please specify); a meeting of agency reps with Battelle; other?
- 2. Alternatively, do you now know enough to be convinced that a Battelle BASICS forecasting project is not worth pursuing from your agency's stand point?
- 3. If your answer to basic question #1 above is affirmative, would your agency be able seriously to consider participating in the funding of an acceptable proposal in FY-1984, and/or in FY-1985?
 - 4. Other points of importance to you.

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If in considering the above points you would find it helpful for us to talk, please call (632-1342). In addition, or alternatively, you may wish to discuss questions you have about the prospectus with the proposed principal investigator, Steve Millett (614 424-6424).

A personal observation: The Battelle prospectus suggests on p.5 three benefits to sponsors. Since all of our agencies are engaged in writing scenarios, making forecasts, and identifying key trends for the purposes mentioned, it seems to me there are additional, and perhaps for some agencies more important, benefits of somewhat different types: (1) having an external product based upon a unique, explicit, systematic and replicable methodology that will confirm and/or challenge our own forecasts, etc.; (2) having a better basis for assessing the BASICS methodology to see if it has additional utilities in the intelligence agencies; and (3) providing a vehicle through which those of us involved in forecasting/planning activities can learn from and along with one another.

INR/LAR: ERPlatig: ljp 6/5/84: x21342

PROJECT PROSPECTUS

ON

GLOBAL AND LATIN AMERICAN SOCIO-ECONOMIC AND POLITICO-MILITARY CONDITIONS TO 1995

TO

DR. E. RAYMOND PLATIG
DIRECTOR, OFFICE OF LONG-RANGE
ASSESSMENTS AND RESEARCH
BUREAU OF INTELLIGENCE AND RESEARCH
U.S. DEPARTMENT OF STATE

May 25, 1984

BATTELLE Columbus Division 505 King Avenue Columbus, Ohio 43201

Project Prospectus

on

GLOBAL AND LATIN AMERICAN SOCIO-ECONOMIC AND POLITICO-MILITARY CONDITIONS TO 1995

to

Dr. E. Raymond Platig
Director, Office of Long-Range
Assessments and Research
Bureau of Intelligence and Research
U.S. Department of State

May 25, 1984

In its report to President Reagan of January 1984, the Kissinger Commission on Latin America observed that "...a great power can choose what challenges to respond to, but it cannot choose where those challenges comeror when. Nor can it avoid the necessity of deliberate choice. Once challenged, a decision not to respond is fully as consequential as a decision to respond...." The commission was making the point that the U.S. exists in an international environment that poses challenges and threats to which the U.S. must react. Perhaps the anticipation of likely challenges and threats in the U.S. security environment might better prepare the U.S. Government to react appropriately when and where problems emerge.

Battelle's Columbus Division (BCD) recommends to the Office of Long-Range Assessments and Research of the U.S. Department of State, and to its associated members of the Intelligence Community, a study that would prepare forecasts of global and Latin American socio-economic and politico-military conditions to 1995. Such a study would provide foresights into likely emerging situations that might present the U.S. Government with "the necessity of deliberate choice" in the future.

BCD's forecasting study would employ its BASICS methodology. BASICS was developed in the 1970s as a collaborative effort of Battelle's four principal research divisions: BCD, Battelle's Pacific Northwest Laboratories (Richland and Seattle, Washington), Battelle-Institut e.V. (Frankurt, West Germany), and Battelle's Geneva Research Centres (Geneva, Switzerland). It combines the methods of idea generation (similar to, but not exactly the

same as, the delphi method), trends analysis, cross-impact analysis, computerized simulations, and scenario generation to provide comprehensive and integrated forecasts of business and government environments. Since the late 1970s, BASICS has been employed in over two dozen forecasting projects, including World Politics in the 1980's, The European Community in the 1980's, World Trade in the 1980's, Key Technologies, and The Global Strategic Environment for U.S. Security to 2002.

BCD recommends that this forecasting study be divided into two principal parts. The first part would be the forecasting of global socioeconomic and politico-military conditions to 1995 and the second part would be the forecasting of Latin American socio-economic and politico-military conditions to 1995. The former part would be completed first and the latter would follow. Each would employ the sequential seven steps of BASICS, which are briefly described below.

Step 1. Identification of the Topic. The tentative topic has been stated above. Several discussions on the topic have already occurred between Dr. S. M. Millett of BCD and Dr. E. R. Platig of the Department of State. Further refinement of the topic would be the first task of this recommended project.

Step 2. Identification of Influencing Factors. Having defined the topic, one must consider and select the most important influencing factors (trends, events, variables, or circumstances) that will shape the forecasting topic. BCD recommends that this step be accomplished by two conferences of experts to be held at Columbus, Ohio, or Washington, D. C. The experts will be selected from universities, industry, the military, and the U.S. Government. The first conference will consist of up to 15 invited experts to discuss the influencing factors that are most likely to mold global socio-economic and politico-military conditions to 1995. The second conference would be of the same size and would discuss the influencing factors for Latin America. BCD would organize and conduct the conferences in cooperation with the sponsor, and it would prepare and distribute a written report summarizing the conference results. From the conferences, BCD project members and the sponsor would glean up to 16 specific descriptors for global conditions and up to 16 descriptors for Latin America for detailed analysis. A suggested, but certainly not final, list of descriptors for global conditions appears in Table 1.

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TABLE 1. SUGGESTED DESCRIPTORS FOR GLOBAL SOCIO-ECONOMIC AND POLITICO-MILITARY CONDITIONS TO 1995

Worldwide GNP growth rate OPEC price of crude oil Price of wheat Levels of world exports U.S. prime interest rate Levels of external debts in LDCs Infant mortality rate in LDCs Nutrition rate in LDCs World population growth rate Levels of multi-national wars Levels of insurgencies and civil wars Global politico-military alliance networks Worldwide military expenditures Number of Marxist-Leninist governments Soviet power projection U.S. power projection

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- Step 3. Descriptor Selection and Analysis. Having obtained the inputs of experts, specific descriptors are selected and analyzed. A short descriptor essay is prepared that includes historical trends, data, present status, and expected alternative outcomes. Sample descriptor essays have already been submitted to Dr. Platig. Each descriptor has alternative outcomes with a priori (judgmental) probabilities of occurence.
- Step 4. Construction of Consistent Sets of Trends. The descriptor essays and outcomes provide the input to the cross-impact matrix. The matrix provides a method to assess the impact of each alternative outcome on the a priori probabilities of all other descriptor outcomes. The cross-impact method provides the means to build consistent sets of multiple trends to prepare integrated scenarios of future conditions. The mechanics of the BASICS cross-impact analysis and the computerized generation of scenarios from it have been described in the "Report on the BASICS Computational Method for Cross-Impact Analysis" by E. J. Honton, G. S. Stacey, and S. M. Millett (February 2, 1984). BCD recommends two matrices for two cross-impact analyses: one for the global conditions and one for Latin American conditions. Results from the former can be integrated into the latter.
- Step 5. Interpretation and Selection of Scenarios. The BASICS computer program calculates all the adjusted probabilities and provides printouts of results. The program produces summaries of all the simulations and organizes coincident descriptor outcomes into scenario types. These results are examined and interpreted by the project team in cooperation with the sponsor to select the framework for three "mainline" scenarios.
- Step 6. Introduction of Disruptive Events. Battelle recommedns that three disruptive events be identified and introduced into the analysis to simulate how they would affect the mainline scenarios. Such disruptive events might be Argentina's default on its foreign debts, an oil crisis, or a specific war occuring.
- Step 7. Preparation of Forecasts. The final interpretation of computer simulations and scenarios provides the basis for forecasts of future conditions. A final report summarizes the process, the results, and the analyses.

Battelle would provide the following products from this recommended project for \underline{each} of the two topics (global conditions and Latin American conditions):

- 1. Prepration and conduct of one conference of experts.
- 2. Report on the results of the conference.
- 3. Up to 16 descriptor essays.
- 4. A completed cross-impact matrix of descriptor outcomes.
- 5. Copies of BASICS computer program print-outs.
- 6. An analytical report.
- 7. One interim briefing.
- 8. A final briefing.

The benefits of this suggested forecasting project to the sponsor would include:

- Scenarios and forecasts of the topics to 1995 that will suggest certain areas of potential problems for U.S. security.
- 2. Scenarios and forecasts for use as inputs to longrange, strategic planning.
- 3. Identification of key trends to monitor.

The expected duration of this suggested project is 18 months. The global conditions portion would require about 10 months and the Latin American portion would require about 8 months. Work could commence as early as September, 1984.

The key BCD personnel who would participate in this suggested project are as follows:

- Dr. Gary S. Stacey Senior Economist and Program Manager of BASICS
- Dr. Stephen M. Millett Principal Research Scientist and manager of strategic forecasting projects
- Dr. Halder Fisher Research Leader, Economics
- Mr. Edward J. Honton Research Scientist, economist, and computer program specialist.
- Dr. Millett would serve as project manager and the principal investigator.

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The BASICS method is unique to Battelle, which is the only institution that offers this forecasting methodology. The BASICS computer program is the proprietary possession of Battelle.

The estimated cost of this recommended forecasting project is \$115,000-\$125,000. The expected type of research contract would be cost plus fixed fee.

This recommended project would be unclassified. A classified version of the results could be achieved under appropriate circumstances.

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